

# Investment opportunities in Chemicals industry in Uzbekistan

December 12-16

**Uzkimyosanoat**





# Uzbekistan is the largest market in Central Asia; stable and fast growing

## Key information


 Uzbekistan map


Comparable to Spain  
or California  
Largest in  
the  
region


 **Area**  
448,978 sq. km


 **Population**  
32.6M (72% under 40)


 **GDP**  
USD 48 billion

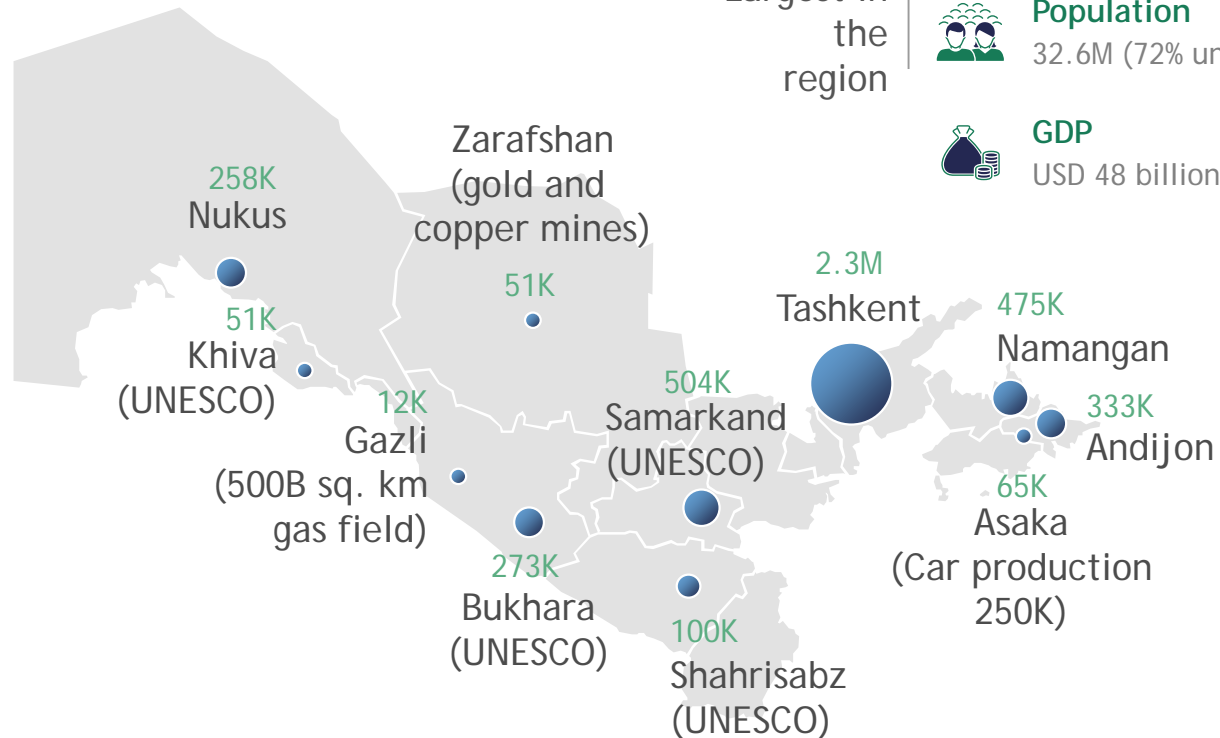
 **Capital**  
Tashkent  
(2.3M - official data)

 **Urbanization**  
~50%

 **Official currency**  
"Sum" - UZS  
(UZS/USD = 8'200)

 **Languages**  
Uzbek (official), Russian  
(commonly used)

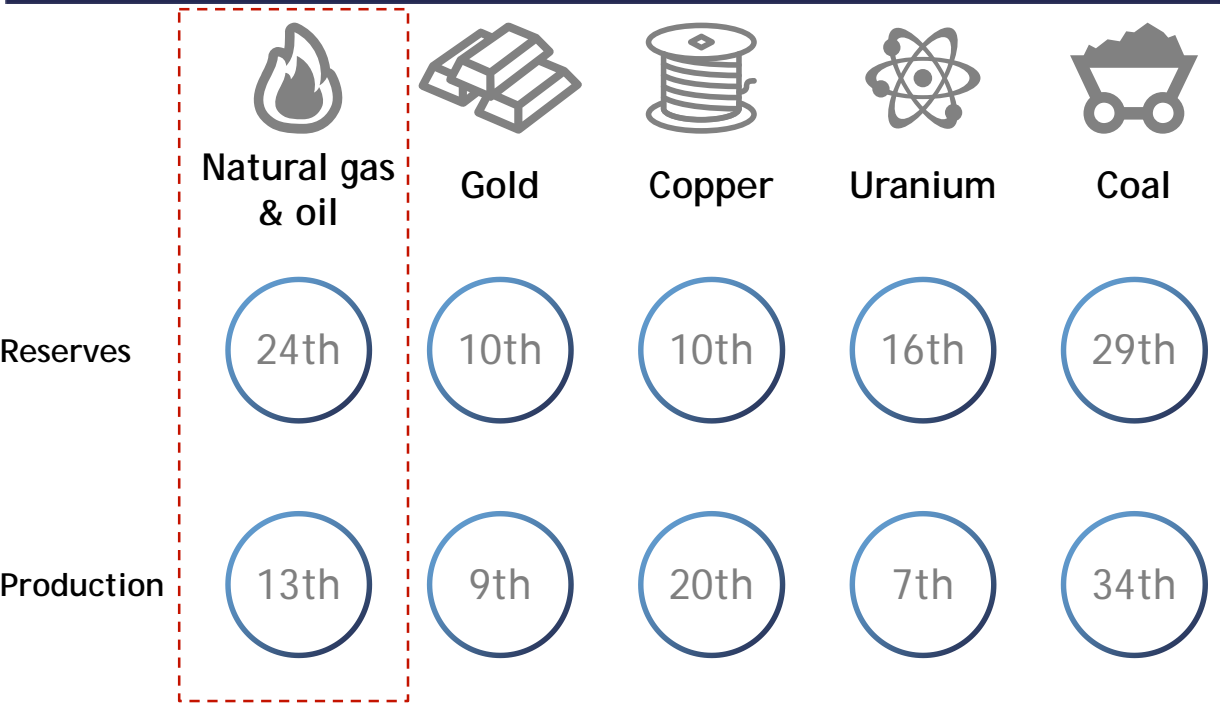
 **Political system**  
Presidential multi-party  
democratic republic




 XX size of population

# Uzbekistan is rich in mineral resources and; the country is actively investing in further value chain segments

Mineral resource diversity excludes the dependence on a single resource type



 Uzbekistan's position in the world

Diversification of the energy supply portfolio



## Hydropower

Investments of USD 2.65 billion in 2017–2025 to develop 18 new projects and upgrade 14 existing plants



## Solar

~51 billion tons of oil equivalent



## Wind

~360 million tons of oil equivalent for wind energy

Source: Natural gas & Coal: BP Statistical Review of World Energy, June 2017; Gold & Copper: U.S. Geological Survey, Mineral 122modity Summaries 2017; Uranium: Uranium 2016: Resources, Production and Demand, a Joint Report by the Nuclear Energy Agency and International Atomic Energy Agency; Uzbekistan State Committee on Geology and Mineral Resources

# Uzbekistan is a rapidly developing economy, pushing for reforms to improve its investment climate

The country's new president has set the course for structural reforms to help realize Uzbekistan's economic potential



Shavkat Mirziyoyev was elected **president** in 2016 declaring a new course of reforms

One of the key priorities of these reforms is the **attraction of FDI**<sup>1</sup>. As part of this effort the new government has launched a number of **initiatives**:



**Liberalization of currency regulation:** exchange rates are market-driven, no limits on purchasing amounts or FX revenues of exporters; Profits repatriation limitations are alleviated



**Tax reduction:** Effective January 1, 2019, corporate profit tax shall be set at 12%, dividend withholding tax at – 5%; also the reduction of royalty is currently under discussion



**Customs procedures:** Significant simplifications in customs procedures are implemented adding to speed and transparency of operations

Positive changes result in improved positions of the country in WB's Doing Business ratings **from #166 (2012) to #76 (2018)**

Along with improved investment climate, the country's economy is growing rapidly: Uzbekistan was in **top-5 of the world's most rapidly growing economies**, with a real GDP growth rate of **8 7.9% in 2015-16, 5.3% in 2017 and expected 5% in 2018 and 2019**<sup>3</sup>

1. FDI — foreign direct investment
2. BP Statistical review 2018
3. World Bank

## International agencies forecasts strong development of the country until 2030:

	Average GDP growth per annum, %
The Economist Intelligence Unit	+5,4 %
International Futures	+5,5 %
United Nations Statistics Division	+5,9 %
International Monetary Fund	+5,9 %



# Uzkimyosanoat JSC is a national producer of a large range of chemicals

**Uzkimyosanoat**



Production

14 Industrial enterprises



Service

6 Service organizations



Products

180 + nomenclature



Staff

30 k + employees



Certification

9001:2015

14001:2015

50001:2011



R&D and design institutes



## Fertilizers

- Nitrogen
- Phosphoric
- Potash

## Non-fertilizer chemicals

- Plastic
- Fiber
- Industrial rubber goods
- Cosmetics
- Soda ash
- other chemical production



# Investment opportunity – Melamine production

## Melamine production



We invite you to invest in the production of melamine



**Growing market demand** - main segments consumers - construction, furniture, coatings



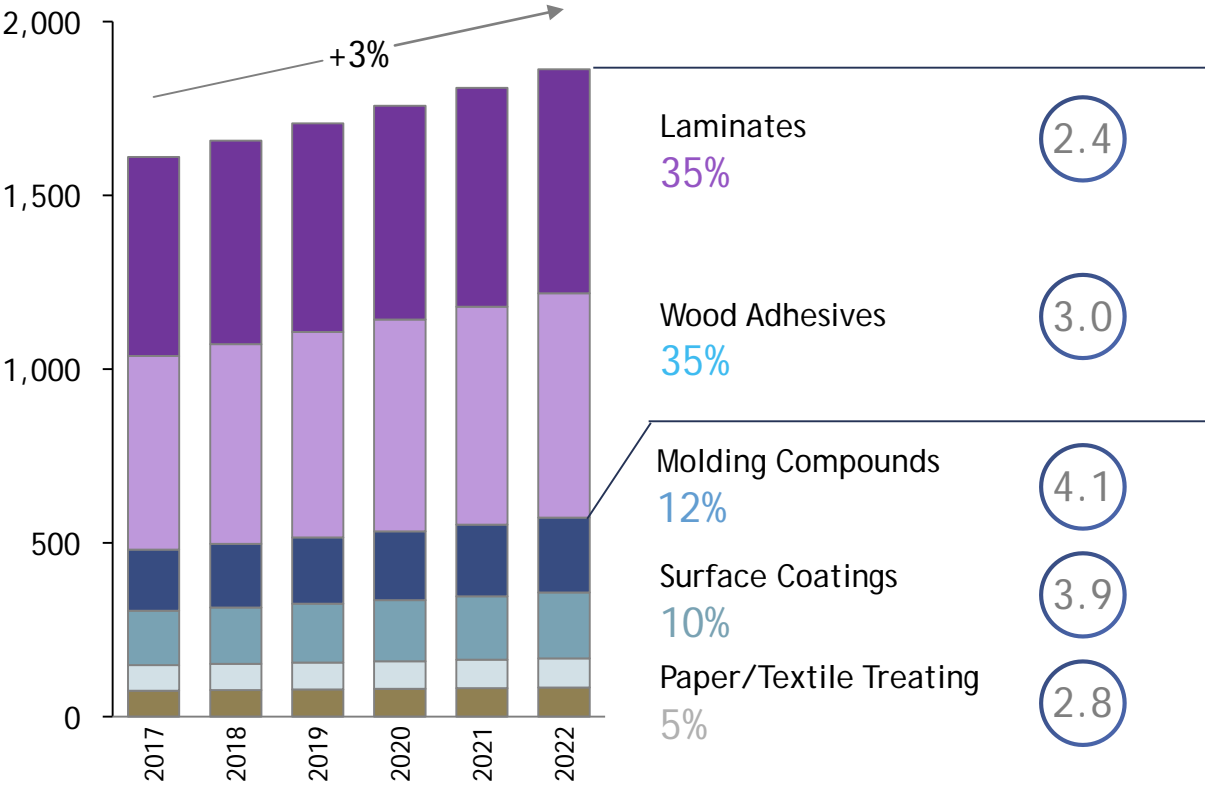
**Large list of markets for export** due to the high price of the product



**Lower capital expenditure** due to production on the basis of the existing chemical plant

# Melamine is a product with growing demand, the main industry consumers - construction and furniture

World Melamine production, thousand tones



## Main markets

Construction (residential and non-residential), remodeling and furniture.

The construction industry is growing in Uzbekistan at ~15% per year, main drivers:

- low provision of housing (15 m<sup>2</sup>/person compared to 21m<sup>2</sup>/person in Kazakhstan)
- increase in average income
- population increase

Dinnerware, circuit breakers, small appliance housings and cosmetic cases

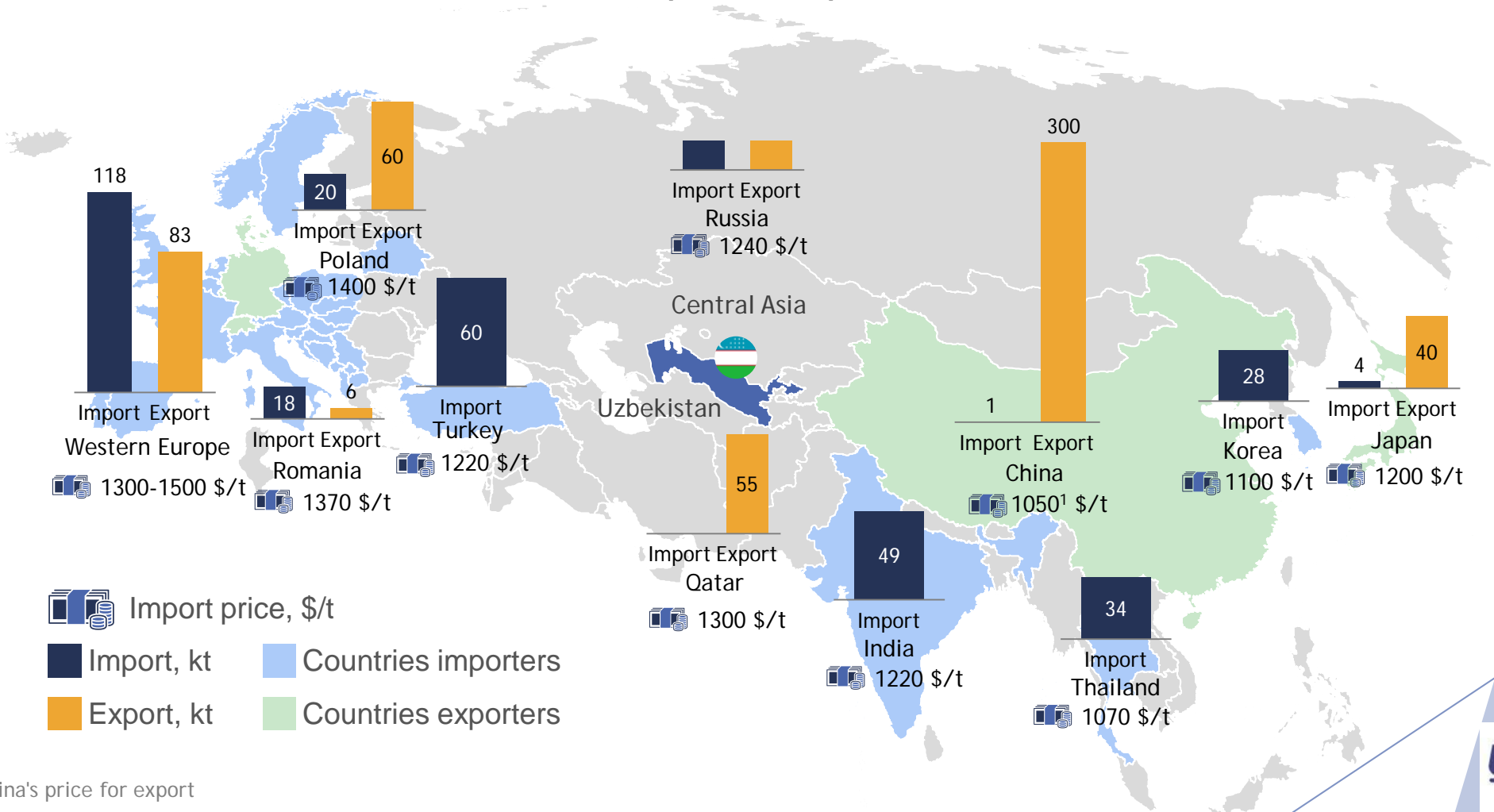
Automotive, OEM, coil, furniture and appliances

Paper and textiles



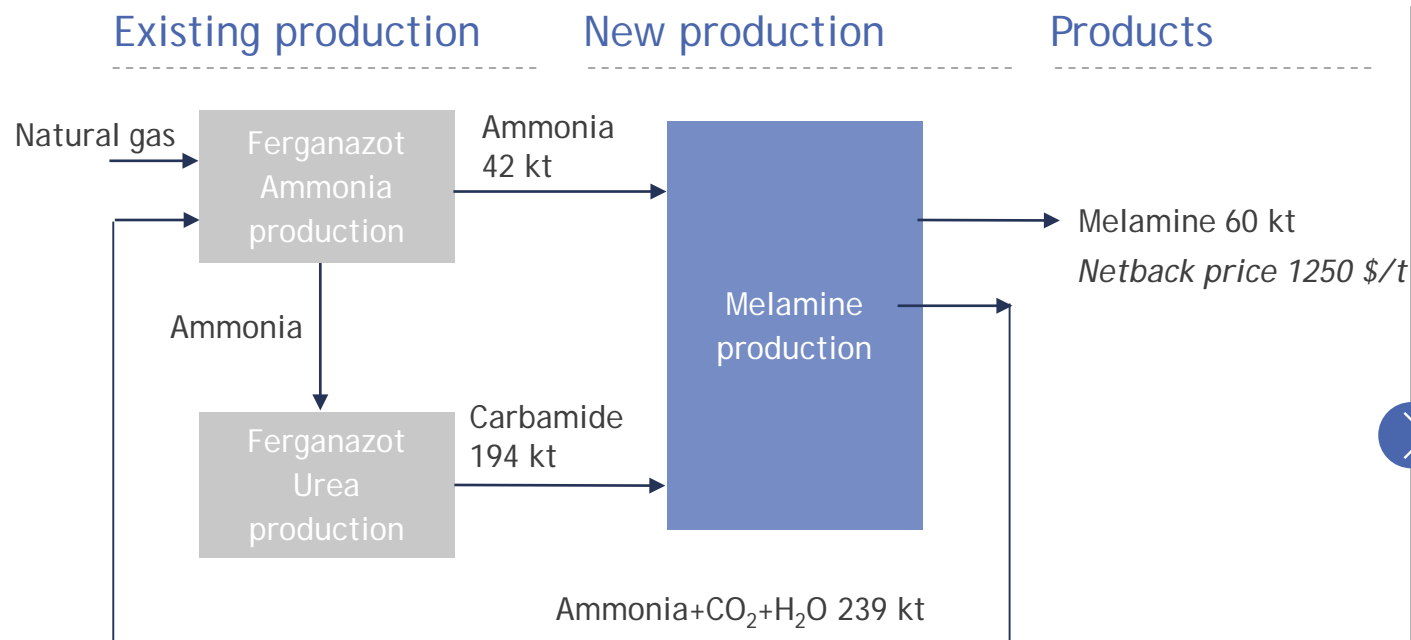
# Western Europe, Turkey and India are the most promising markets for Uzbekistan melamine

The volume of imports and prices in 2017



1. China's price for export

# Building new production on base of existing fertilizer plant improves it economic effectiveness



## Existing infrastructure

- ⚡ Power (grid)
- 💧 Cooling water, steam
- 🚂 Access to railway road
- 🔥 Natural gas
- ⚙️ N<sub>2</sub>



**\$140M**  
total CAPEX<sup>1</sup>



Initial economic  
assessment

NPV<sup>2</sup> **\$30M**

IRR **12 %**

1. Class 3 estimate  
2. @ 10 %



Investors are  
invited to invest  
\$40-50M with  
**IRR = ~20%**

preliminary

Overall project  
financial indicators

Investors  
financial indicators

	Capital expenditures \$M	140	40-50	Equity investment
	IRR %	12	up to 20	
	NPV (@10%) \$M	30	30	
	Profitability index	1.2	2.4	
	Payback period (since start of production) Years		5	

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# Investment opportunity – Phosphate fertilizers

## Phosphate fertilizers complex



We invite you to invest in the phosphate fertilizers complex



Phosphate fertilizers are demanded product for agroindustry of Uzbekistan with growth potential x2,4 up to 480 kta  $P_2O_5$



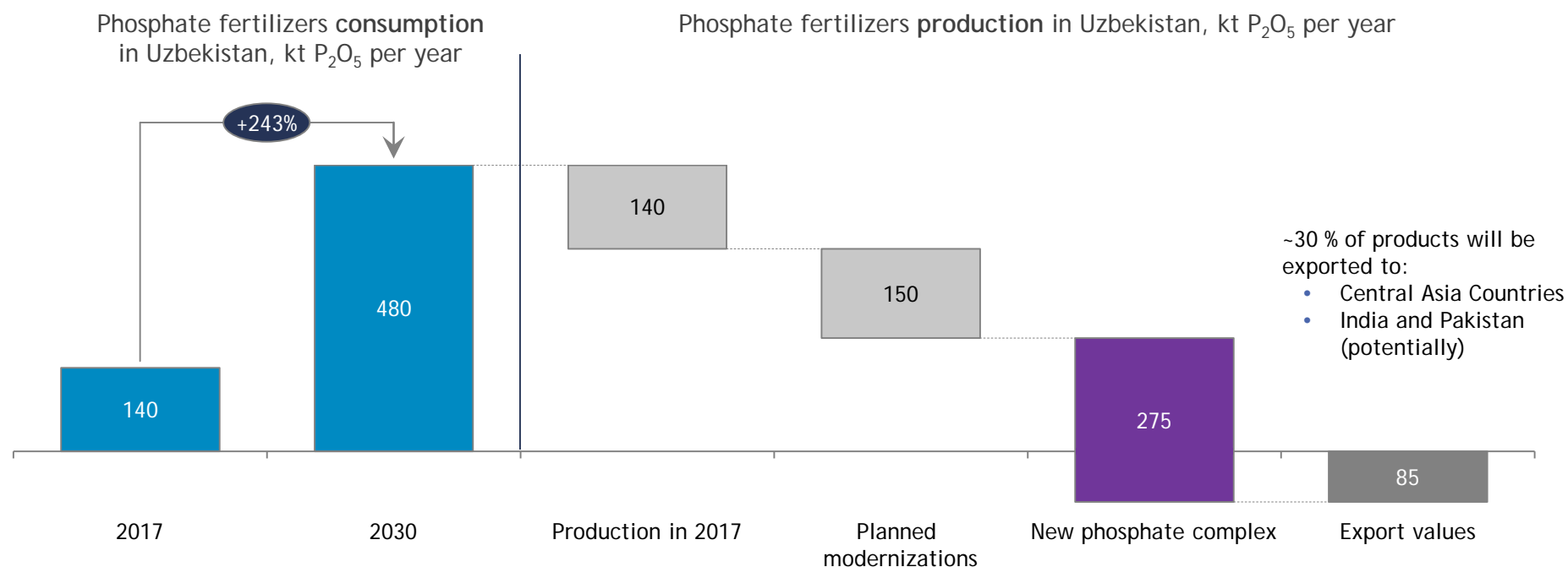
The project includes the development of a new phosphate ore deposit for the needs of the complex



Synergy of process plants improves project economics



# New phosphate complex will supply the local Uzbekistan market and export ~30 % of its product basket to nearby countries



## Consumption growth levers

Arable land area

+26%

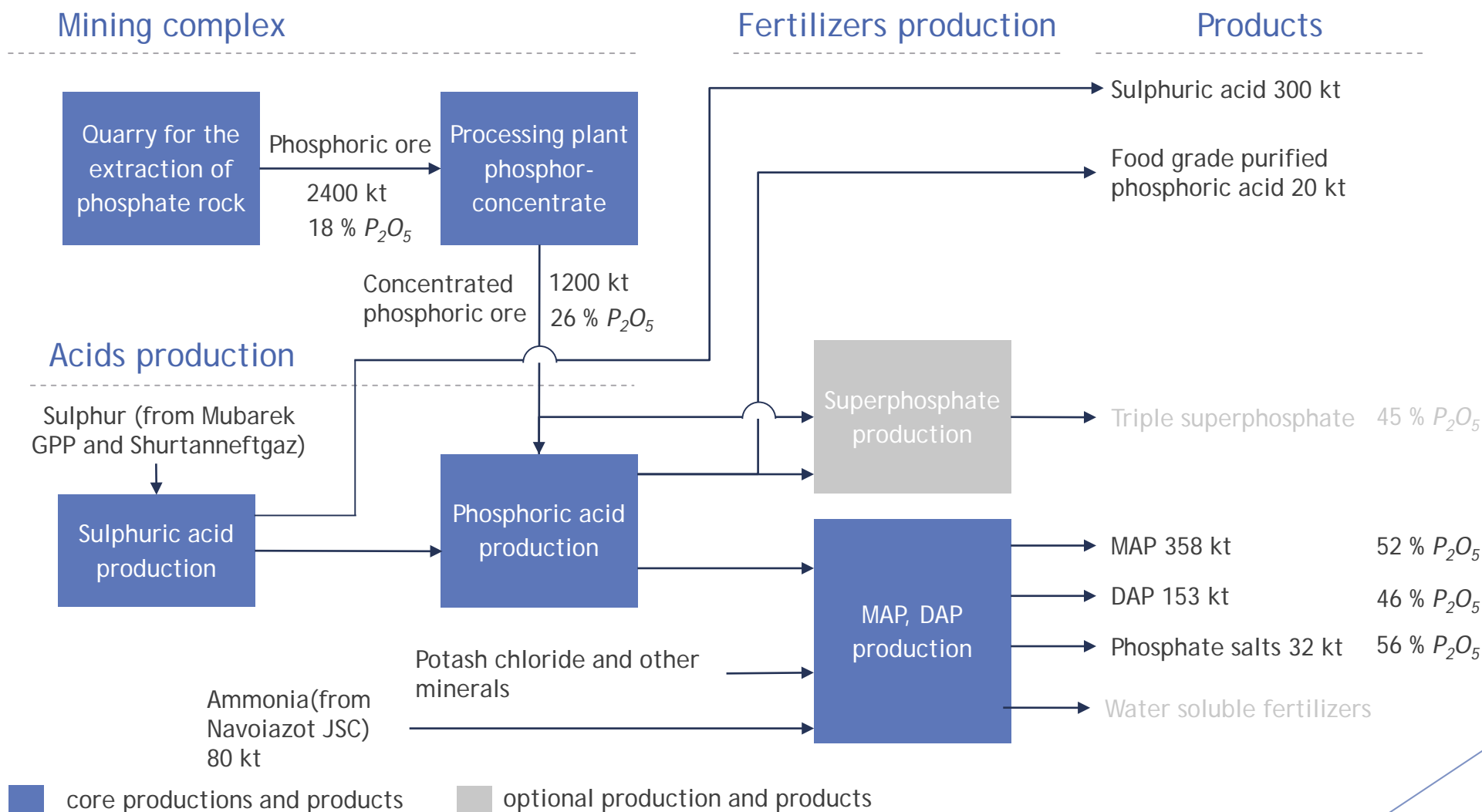
Agroindustry plans to use part of fields for repeated sowing - it will require additional fertilizers

Fertilizer application rates

x2

Current consumption is limited by existing production (140 kta) and has the potential to increase by two times.

The project includes the mining complex, acids and fertilizers productions, the total output of  $P_2O_5$  is 275 kt



\*Final configuration will be defined based on the feasibility study

# Cheap raw material, synergy of technological production, high demand for the final products makes the project economically effective

## Raw materials

Phosphoric ore development of the new Tamdybulak field specifically for the complex. Stocks of raw materials exceed 100 years.

## Technical synergies

Sulphuric acid production own generation of electricity using to the heat released in the process for the needs of the whole complex

Fertilizers production flexible adjustment of phosphate fertilizer output to the needs of the market

Phosphoric acid production production of acid of different purity simultaneously for several productions

## Products

Sulphuric acid for the needs Navoy NGMK - one of the largest extraction and refinery mining company in the country

Food grade purified phosphoric acid B2C product for carbonated soft drinks production

MAP, DAP, Phosphate salts valuable mixed fertilizers with several active component (nitrogen, potassium, etc)

Triple superphosphate (optional) phosphate fertilizer



**\$900-960M**  
total CAPEX



Initial economic assessment

NPV<sup>1</sup> **\$60M**




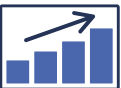

IRR **10-12 %**



Investors are  
invited to invest  
\$190M with  
**IRR= ~19%**

## Overall project financial indicators

## Investors financial indicators

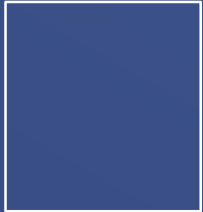
	Capital expenditures \$B	960	190 <small>Equity investment</small>
	IRR %	10-12	18-19
	NPV (@10%) \$B	70	70
	Profitability index	1.1	2.6
	Payback period (since start of production) Years		6

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# Agenda

## Other investment opportunities (preliminary)

1. Production of pesticides
2. Production of paints and varnishes
3. Production of household chemicals
4. Hydrogen peroxide production
5. Caustic soda production





## Production of pesticides



Indicative CAPEX- US\$ 30-40 mln  
Indicative Capacity: 10 KTA



### Market attractiveness:

- Domestic market size: US\$ ~30 mln
- Market expected to grow up to US\$ 60-80 mln by 2030
  - Under-consumption of pesticides: 0.9 kg per ha, expected to grow to 1.7 kg per ha by 2030
- No significant pesticides production in other Central Asian countries
  - Central Asia market size: \$250 mln in 2017 (excl. UZ)



### Raw materials:

- Basic raw materials (chlorine, sulfur, etc.) available locally
- Complex raw materials need to be imported



Potential partner company: BASF, Bayer CropScience

## Production of paints and varnishes



Indicative CAPEX - US\$ 20-40 mln



Production of paints and varnishes for a growing domestic market



Market attractiveness:

- Domestic market size: \$US 80 mln. in 2017
  - Per capita consumption: 1.5 kg/person
  - Kazakhstan: 5.3 kg/person (x3.5 vs Uzbekistan)
  - Russia: 8.2 kg/person (x5.5 vs Uzbekistan)
- Market expected to double by 2030
  - Growing household disposable incomes, expected shift toward higher-priced products
  - Strong demand from automotive and construction sectors
- Neighboring countries are net importers



Raw materials:

- Raw materials need to be imported



Potential partner company: BASF Coatings

## Production of household chemicals



Indicative CAPEX - US\$ 20-40 mln



Production of household chemicals for a growing domestic market



Market attractiveness:

- Laundry detergents market size: 80 KTA in 2017
  - Per capita consumption: 2.5 kg/person, expected to grow to 6 kg/person
- Expected market size: up to 200 KTA by 2030
  - Growing household disposable incomes, expected shift toward higher-priced products
- Neighboring Central Asian countries are net importers



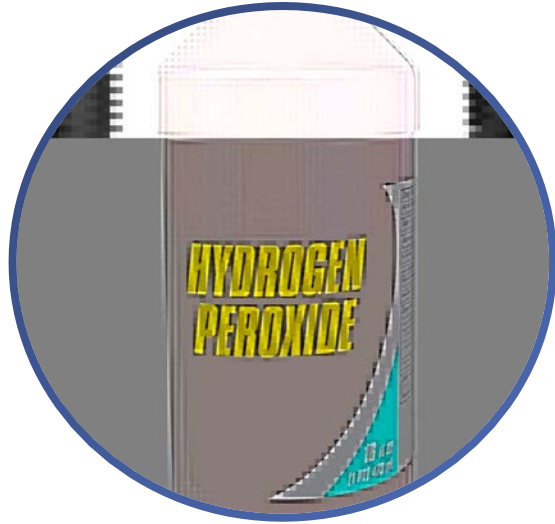
Raw materials:

- Soda ash, baking soda, sodium sulfate: produced in UZ



Potential partner company: Henkel

## Hydrogen peroxide production



CAPEX - US\$ 15 mln

Project`s capacity:

- Hydrogen peroxide - 10 KTA



Market attractiveness:

- Domestic market size: 5.5 KTA in 2017
- Expected to grow to 10.3 KTA by 2030
- Substantial demand from neighboring countries
- No existing production capacities in the region
  - Central Asia market size: 14 KTA in 2017 (excl. UZ)



Raw materials:

- Sulfuric acid, caustic soda, hydrogen
- All available domestically

Potential partner company: Evonik, Solvay

## Caustic soda production



CAPEX – US\$ 70 mln

Project`s capacity:

- Caustic soda – 30 KTA
- Chlorine by-product – 28 KTA



Market attractiveness:

- Caustic soda:
  - Domestic market size: 73 KTA in 2017
  - Expected to grow to 154 KTA by 2030
  - Unmet domestic demand up to 56 KTA by 2030
- Chlorine:
  - Demand for chlorine for PVC production project



Raw materials:

- Rock salt: abundant in the country



Potential partner company: ThyssenKrupp



## Production of PET



### Market attractiveness:

- Domestic market size: US\$ ~45 mln including with expectations to grow up to US\$ ~450 mln by 2030
- Central Asia market size: \$680 mln in 2030 (including UZ)



### Polyester fibers are most relevant PET segment for Uzbekistan

Used for fabrics production, which are further used for the production of apparel, home furnishings, and other finished textile good

- #6 country in global cotton production
- 5% - share of textile industry in Uzbekistan GDP
- 18% - annual growth rate of textile industry output
- 13 textile clusters are building in Uzbekistan now



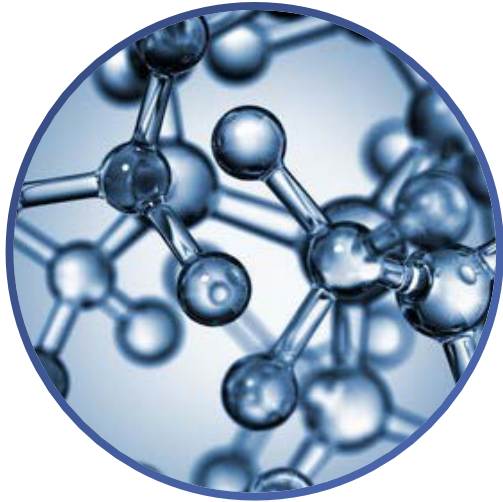
### Raw materials:

- Ethylene available locally
- P-xylene need to be imported or new production need to be constructed - aromatics resources available locally



Potential partner company: BASF

## Production of catalysts and chemical reagents



### Market attractiveness:

- Domestic market size in 2017 US\$ ~ 20 mln
- No significant catalysts and chemical reagents production in other Central Asian countries
  - Central Asia market size: \$130 mln in 2017 (excl. UZ)



### Raw materials:

- Basic raw materials (metals, acids, etc.) available locally
- Complex raw materials need to be imported



Potential partner company: BASF